UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------------------|----------------------|---------------------|------------------|
| 10/582,183 | 06/08/2006 | Kozo Shimokawa | 60883-8003.US01 | 8927 |
| 22918 PERKINS COI | 7590 05/13/200 E LLP | EXAMINER | | |
| P.O. BOX 1208 | | CHACKO, SUNIL | | |
| SEATTLE, WA 98111-1208 | | | ART UNIT | PAPER NUMBER |
| | | | 2625 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 05/13/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | | |
|--|--|---|------------------------------|--|--|--|
| Office Action Summary | | 10/582,183 | SHIMOKAWA ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | SUNIL CHACKO | 2625 | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ | Pasnonsive to communication(s) filed on 13 Fe | shruary 2000 | | | | |
| • | Responsive to communication(s) filed on <u>13 February 2009</u> . This action is FINAL . 2b) This action is non-final. | | | | | |
| 2a)⊠ 3)□ | / — | | ecoution as to the morits is | | | |
| ا ال | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| | closed in accordance with the practice under L | x parte Quayle, 1955 C.D. 11, 45 | 5 O.G. 215. | | | |
| Dispositi | on of Claims | | | | | |
| 4)🛛 |)⊠ Claim(s) <u>1,2 and 5-7</u> is/are pending in the application. | | | | | |
| • | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | |
| · · · · · · · · · · · · · · · · · · · |)⊠ Claim(s) <u>1,2 and 5-7</u> is/are rejected. | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | |
| 8) | Claim(s) are subject to restriction and/or | election requirement. | | | | |
| ٥,١ | and conspect to recommend and are seen are seen as a seen are seen are seen as a seen are seen a | | | | | |
| Applicati | on Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 2) Notic 3) Inform | t(s) be of References Cited (PTO-892) be of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | |

Art Unit: 2625

DETAILED ACTION

Response to Amendment

- 1. Applicant's amendment filed on 02/13/2009 has been entered. Claims 1-2 & 5-7 have been amended. Claims 3-4 has been cancelled. Claims 1-2, 5-7 are pending with claims 1, 5, 6, & 7 being independent claims.
- 2. Applicant's amendment dated 02/13/2009, responding to the 11/14/2008 Office action provided a response to the objection of the Abstract. The objection to the Abstract is hereby withdrawn in view of Applicants' amendment to the Abstract.
- 3. The objection to Claims 2 has been withdrawn, as discussed per phone interview.

Response to Arguments

4. Applicant's argument's with respect to claims 1-2 & 5-7 have been considered but are most in view of the new ground(s) of rejections.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2625

6. Claims 1& 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al (US Patent # 6,580,524 B1) in view of Endo et al. (US Patent # 6,637,327 B2) in further view of Shiraishi (US Patent # 6,999,200 B2)

As to Claim 1,

- Weichmann et al teaches a plurality of print data to <u>adjust one or more of position</u>
 and shape of a print image is created without performing mechanical position or
 shape correction in a printing device, (See abstract, Weichmann teaches that all
 processing for image correction occur before the actual printing therefor the
 machine does not perform mechanical or shape correction)
- wherein each of the plurality of print data includes an image type data for at least one image type constituting the corresponding print image, and a position data for determining at least one of an image type position data corresponding to a position of the image type in the print image and an image type shape data indicating a shape of the image type, (See column 4 lines 17-23, Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data and image position)

Weichmann et al. does not disclose the following limitations:

 wherein creating the print data includes: <u>determining</u> deformation information on an amount of elongation or contraction in a direction in which the printing medium is to be elongated or contracted based <u>on a previously printed print image</u> when the <u>previously printed</u> print image is made in a printing operation for the plurality

Page 4

of print images on the printing medium by the use of the plurality of printing plates

adjusting one or more of the position and the shape of the print image without
 performing mechanical position or shape correction in the printing device
 including correcting at least one image type data constituting at least one of the
 plurality of print images in terms of elongation or contraction in the direction in
 which the printing medium is to be elongated or contracted, by changing the
 position of the image type data and the shape of the image type data on the
 basis of the corresponding position data and the deformation information of the
 previously printed print image; and generating the print data subjected to the
 correction in terms of elongation or contraction.

However, Endo et al. teaches a control apparatus for a multicolor printing press. Endo et al. also teaches a method of correction for elongation or contraction errors that takes place in the printing medium during the printing process. Endo et al. teaches that the his method does not perform mechanical or shape correction instead uses a previously printed image to correct for elongation or contraction errors, See column 7 lines 37-43. Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors, See column 7 lines 44-48. It would have been obvious to one skilled in the art at the time of the invention to combine Weichmann et al. in view of Endo et al. because it would provide the user with quality prints.

Weichmann et al. in view of Endo et al. does not disclose the following limitations:

Art Unit: 2625

a method of creating print data, in which prior to creating binary image data in a raster image processor (RIP) including a plurality of printing-plate creation data for respectively creating a plurality of printing plates for sequentially printing a plurality of print images on a printing medium using the plurality of printing plates.
 However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of

Page 5

basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine Weichmann et al in view of Endo et al. in further view of Shiraishi because it would provide a printing system with a plurality of printing plates the ability to produce quality prints, without producing a test print.

As to Claim 2 which depends on Claim 1,

Weichmann et al. in view of Endo et al. in further view of Shiraishi further teaches the method of creating print data,

- wherein the deformation information corresponds to a print condition of the printing medium when each print is made, (See Weichmann et al. column 6 lines 30-35)
- wherein the deformation information is stored in a deformation information table,
 and the deformation information in the deformation information table is

Art Unit: 2625

automatically set on the basis of the print condition when elongation or contraction correction is performed. (See Weichmann et al column 7 lines 39-50)

Page 6

7. Claim 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (US Patent # 6,637,327 B2) in view of Weichmann et al (US Patent # 6,580,524 B1) in further view of Shiraishi (US Patent # 6,999,200 B2)

As to Claim 5,

- Endo et al. teaches <u>an article of manufacture comprising: a computer-readable</u> <u>storage media providing instructions which, when executed by a computer, cause</u> <u>the computer to perform a method for adjusting one or more of position and</u> <u>shape of a print image without performing mechanical position correction in a</u> <u>printing device, the instructions including:</u> (See, column 5 lines 1-8)
- wherein the instructions to create the print data for the print image includes: instructions to determine deformation information of a print image downstream from the print image during printing of the downstream print image in the printing device, the deformation information indicating an amount of elongation or contraction correction to be applied to the printing medium in a direction the printing medium is to be elongated or contracted; (See column 7 lines 37-43, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

Art Unit: 2625

instructions to adjust one or more of the position and the shape of the print image
without performing mechanical position or shape correction in the printing device
including correcting the image type data of the print image by changing the
position of the image type data in the print image and the shape of the image
type data in the print image based on corresponding position data and the
deformation information of the downstream print image; and instructions for
generating the print data for the print image based on the corrected image type
data of the print image to match print positions of the print image with
corresponding print positions of the downstream print image. (See column 7 lines
44-48, Endo goes on to teach that the print data is corrected by adding error
values to the horizontal and vertical directions to accommodate for the errors)

Page 7

wherein the print data for the print image includes an image type data for an
image type corresponding to the print image, and a position data for determining
one or more of an image type position data corresponding to a position of the
image type in the print image and an image type shape data indicating a shape
of the image type in the print image.

However, Weichmann et al. teaches a method of controlling a permanent printing plate. Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data, image position and shape, see column 4 lines 17-23. It would have been obvious at the time of the invention for one skilled in the art to combine Endo et al. in view of Weichmann et al. because it allows

Art Unit: 2625

the printing system to have a computer program that would create high quality prints without defects caused by contraction and elongation of the printing medium.

Endo et al. in view of Weichmann et al. does not disclose the following limition.

• <u>instructions to create print data for the print image prior to creating binary image</u>

<u>data including printing-plate creation data for printing the print image on a printing</u>

<u>medium using a plurality of printing plates,</u>

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine, Endo et al in view of Weichmann et al. in further view of Shiraishi, because it would create a an efficient computer program that would eliminate the need for unnecessary test prints.

As to Claim 6,

- Endo et al. teaches an <u>article of manufacture comprising:</u> a computer-readable recording medium containing instructions, which when <u>executed by a computer</u>, <u>cause the computer to perform a method</u> for creating print data, the instructions including: (See, column 5 lines 1-8)
- wherein the instructions for creating the print data include: instructions to
 determine deformation information on an amount of elongation or contraction in a
 direction in which the printing medium is to be elongated or contracted based on

Art Unit: 2625

a previously printed print image while the previously printed print image is being printed to the printing medium using the plurality of printing plates; (See column 7 lines 37-43, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

Page 9

• instructions to adjust one or more of the position and the shape of the print image without performing mechanical position or shape correction in the printing device including correcting the image type data of the print image in terms of elongation or contraction in the direction in which the printing medium is to be elongated or contracted by changing the position of the image type data and the shape of the image type data based on corresponding position data and the deformation information of the previously printed print image; and instructions to generate the print data for the print image subjected to the elongation or contraction correction. (See column 7 lines 44-48, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

Endo et al. does not disclose the following limitations:

wherein the print data includes an image type data including an image type of the
print image and a position data including one or more of an image type position
data corresponding to a position of the image type in the print image and an
image type shape data indicating a shape of the image type in the print image.

However, Weichmann et al. teaches a method of controlling a permanent printing plate.

Weichmann et al. further teaches his method uses PostScript Format (PSF), which

Art Unit: 2625

represents the image, including the position data, image position and shape, see column 4 lines 17-23. It would have been obvious at the time of the invention for one skilled in the art to combine Endo et al. in view of Weichmann et al. because it allows the printing system to have a computer program that would create high quality prints without defects caused by contraction and elongation of the printing medium.

Endo et al. in view of Weichmann et al. does not disclose the following limitation;

• instructions to create print data for printing a print image in a printing device, in which the print data is created before creating binary image data including a plurality of printing-plate creation data for printing the print image on a printing medium using a plurality of printing plates.

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine, Endo et al in view of Weichmann et al. in further view of Shiraishi, because it would create a an efficient computer program that would eliminate the need for unnecessary test prints.

As to Claim 7

• Endo et al teaches <u>wherein creating the print data for the print image includes:</u>

<u>determining deformation information of a print image downstream from the print</u>

<u>image during printing of the downstream print image, the deformation information</u>

Art Unit: 2625

including an amount of elongation or contraction correction to be applied to the printing medium in a direction the printing medium is to be elongated or contracted; (See column 7 lines 37-43, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

• adjusting one or more of the position and the shape of the print image without performing mechanical position or shape correction in the printing device including correcting the image type data of the print image by changing the position of the image type data and the shape of the image type data based on the deformation information of the downstream print image; and generating the print data for the print image based on the corrected image type data to match print positions of the print image with corresponding print positions of the downstream print image. (See column 7 lines 44-48, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

Endo et al. does not disclose the following limitations:

wherein the print data includes image type data corresponding to an image type
of the print image, and a position data for determining one or more of an image
type position data corresponding to a position of the image type in the print
image and an image type shape data indicating a shape of the image type in the
print image.

Art Unit: 2625

However, Weichmann et al. teaches a method of controlling a permanent printing plate. Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data, image position and shape, see column 4 lines 17-23. It would have been obvious at the time of the invention for one skilled in the art to combine Endo et al. in view of Weichmann et al. because it allows the printing system create a high quality prints without defects caused by contraction and elongation of the printing medium.

Endo et al. in view of Weichmann et al. does not disclose the following limitation:

A method comprising: creating print data for a print image prior to creating binary
image data in a raster image processor (RIP) including printing-plate creation
data for printing the print image on a printing medium using a plurality of printing
plates in a printing device,

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine, Endo et al in view of Weichmann et al. in further view of Shiraishi, because it would create a an efficient method that would eliminate the need for unnecessary test prints.

Art Unit: 2625

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNIL CHACKO whose telephone number is (571)270-7221. The examiner can normally be reached on Mon-Thurs 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SUNIL CHACKO/ Examiner, Art Unit 2625

/Benny Q Tieu/ Supervisory Patent Examiner, Art Unit 2625